



CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.06/KRIDL/WMM/Gradation/2013-14



06.05.2014

GRADATION FOR WMM MORTH TABLE-400-11

Client : Asst. Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : Technical Manager - 1, KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Akashavani Layout in Ward No.06, Dasarahalli Village limits, BBMP, Bangalore.

Reference : AEE/BTP/(WO)/05/2014-15 Dated: 21.04.2014

Date of Testing : 06.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 26000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	1020	1020	3.9	96.1	95-100
22.4	6245	7265	27.9	72.1	60-80
11.2	5685	12950	49.8	50.2	40-60
4.75	4270	17220	66.2	33.8	25-40
2.36	3795	21015	80.8	19.2	15-30
0.600	2170	23185	89.2	10.8	8-22
0.075	2530	25715	98.9	1.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

(Signature)
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(Signature)
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Job No.: CTCE/BBMP/W.No.06/KRIDL/CUBE/2013-14



21.05.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer**, Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager - 1**, KRIDL, Bangalore.

Name of the work : Improvements to roads and drains at Akashavani Layout in Ward No.06, Dasarahalli Village limits, BBMP, Bangalore.

Reference : AEE/BTP/(WO)/05/2014-15 Dated: 21.04.2014

Sample ID : Drain Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm²

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M₂₀

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	23.04.2014	21.05.2014	8.394	506.7	22.52
2	23.04.2014	21.05.2014	8.476	515.4	22.91
3	23.04.2014	21.05.2014	8.528	524.6	23.32

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Job No.: CTCE/BBMP/W.No.06/KRIDL/SDBC/Bitumen/2014-15

15.05.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	Asst. Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	Technical Manager - 1, KRIDL, Bangalore.
NAME OF THE WORK	Improvements to roads and drains at Akashavani Layout in Ward No.06, Dasarahalli Village limits, BBMP, Bangalore.
REFERENCE	AEE/BTP/(WO)/05/2014-15 Dated: 21.04.2014
SAMPLE I/D	Roads and Drains at Akashavani Layout W.No.06
DATE OF TESTING	15.05.2014



BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474.5	475.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25.5	24.50
7. Bitumen content in %	5.10	4.90
8. Average	5.00	

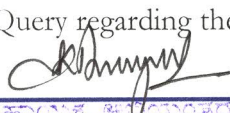
GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	38.62	8.14	8.14	91.86	90-100
4.75	267.4	56.35	64.49	35.51	35-51
2.36	46.32	9.76	74.26	25.74	24-39
1.18	46.57	9.81	84.07	15.93	15-30
0.3	31.64	6.67	90.74	9.26	9-19
0.075	28.52	6.01	96.75	3.25	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	43.97	8.79	8.79	91.21	90-100
4.75	280.6	56.12	64.91	35.09	35-51
2.36	53.47	10.69	75.61	24.39	24-39
1.18	46.52	9.30	84.91	15.09	15-30
0.3	29.85	5.97	90.88	9.12	9-19
0.075	28.45	5.69	96.57	3.43	3-8

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